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Ira J Schaefer Chadbourne & Parke 30 Rockefeller Plaza New York, NY 10112

FILING OR 371

CONFIRMATION NO. 1247 CORRECTED FILING RECEIPT \*OC000000020787769\*

Date Mailed: 10/11/2006

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# Applicant(s)

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### Power of Attorney:

Ira Schaefer-26802

# Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP00/02582 04/20/2000

### Foreign Applications

JAPAN 11-115867 04/23/1999 JAPAN P2000-095908 03/30/2000

If Required, Foreign Filing License Granted: 02/13/2001

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US09/720,235

Projected Publication Date: 371 Complete

Non-Publication Request: No

Early Publication Request: No



Title

OPTICAL FERRULE AND MOLDING METHOD THEREFOR, AND OPTICAL CONNECTOR USING THIS OPTICAL FERRULE

Preliminary Class

385

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# (12) United States Patent Nishumura et al.

(10) Patent No.: US 7,232,261 B1 (45) Date of Patent: Jun. 19, 2007

(54) OPTICAL FERRULE AND MOLDING METHOD THEREFOR, AND OPTICAL CONNECTOR USING THIS OPTICAL

5,975,770 A \* 11/1999 Yanagi et al. ......................... 385/78

FERRULE (75) Inventors: Akito Nishumura, Sakura (JP); Toru

## FOREIGN PATENT DOCUMENTS

Arikawa, Sakura (JP); Yasuhiro Tamaki, Sakura (JP)

0938003 8/1999

(73) Assignee: Fujikura Ltd., Tokyo (JP)

# (Continued)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Foreign Application Priority Data

(2006.01)

# OTHER PUBLICATIONS Satake, et. al., "US Conec Spreads MT Connector Into North

(21) Appl. No.: 09/720,235

Amenrican Markets". NTT Review, Telecommunucations Association, Tokyo Japan. vol. 5, No. 4, Jul. 1, 1993, pp. 82-89.

(22) PCT Filed: Apr. 20, 2000 PCT/JP00/02582

(Continued)

(86) PCT No.:

Primary Examiner-Javaid H. Nasri (74) Attorney, Agent, or Firm-Chadbourne & Parke LLP

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ABSTRACT

EP

(87) PCT Pub. No.: WO00/65392

An optical ferrule is disclosed in which a concave portion 17c having a gate G in resin molding disposed therein is formed in a ferrule body 11. According to this constitution, it is possible to easily cut a flash 10 left after a gate of the concave portion 17c of the ferrule body 11 is cut after molding with a gate cutter, so that, when the ferrule body 11 is fitted in a housing of an MPO connector and the like, the problem that the flash 10 protrudes from the concave portion 17c and the flash 10 hitching to an inner wall of the housing dose not occur. Accordingly, the labor required for removing the flash 10 by polishing can be eliminated, and hence productivity of the ferrule body 11 can be improved. Thus,

PCT Pub. Date: Nov. 2, 2000

(58) Field of Classification Search

Apr. 23, 1999 (JP)

Mar. 30, 2000 (JP)

G02B 6/36

(51) Int. Cl.

(52) U.S. Cl. ...

(30)

(56)

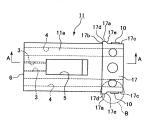
See application file for complete search history.

References Cited U.S. PATENT DOCUMENTS

4,911,518 A \* 3/1990 Miller ..... 5,381,500 A \* 1/1995 Edwards et al. ......................... 385/78

# a large number of ferrule bodies 11 can be automatically 12 Claims, 16 Drawing Sheets

manufactured without requiring much manpower.



.. 11-115867

...... 385/78

385/82, 52, 77, 78

... 385/64,

..... P2000-095908